

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A short arc type high pressure discharge lamp comprising:
a pair of electrodes disposed inside the discharge lamp and facing each other,
a light emitting portion containing more than 0.15 mg/mm^3 mercury, and
sealing portions that extend to both sides of the light emitting portion, seal part of
electrodes respectively, and join the electrodes and metallic foils, wherein ~~a cross-sectional view~~
~~of the metallic foil is~~ formed in an approximately omega shape in a cross-sectional view thereof
by press processing.

2. (Original) The short arc type high pressure discharge lamp according to claim 1,
wherein in a joint portion of at least one of the electrodes and one of the metallic foils, there are
at least two welding traces welded from a width direction of the one of metallic foils.

3. (Currently amended) A method of welding an electrode and a metallic foil, comprising
steps of:

~~preparing~~ forming a metallic foil having a curved surface portion by press processing,
wherein a cross-sectional view of the metallic foil is an approximately omega shape,
placing the electrode in the curved surface, and
welding from a width direction of the metallic foil.

4. (Original) A short arc type high pressure discharge lamp having an electrode assembly
made by the method according to claim 3.

5. (New) A short arc type high pressure discharge lamp comprising:
a pair of electrodes disposed inside the discharge lamp and facing each other,

a light emitting portion containing more than 0.15 mg/mm^3 mercury, and
sealing portions that extend to both sides of the light emitting portion, seal at least part of the electrodes respectively, and join the electrodes and metallic foils, wherein the metallic foil is an approximately omega shape and more than half of volume of one of the electrodes is fit in the metallic foil.